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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number: 09/445,576

Filing Date: July 17, 2000

Title: Trimerising Module

Examiner: Canella, K.

Art Unit: 1642

Inventor: Thogersen, H., *et al*

#1810
CV
2-11-03

Commissioner of Patents and Trademarks
Washington, D.C., 20231

Response and Amendment Under 37 C.F.R. § 1.111 to Paper Number 16

Sir,

Responsive to the Office Action dated May 31, 2002, please amend the application as set forth below and consider the following remarks. A petition for a 3 month extension of time with the requisite fee is enclosed as the 6 month deadline for response is Monday, December 02, 2002, as November 30, 2002 is a Saturday.

Introduction

Claims 1, 19, 22-24, and 68-105 are currently pending in this application. Following entry of these amendments, claims 1, 19, 22-23, and 68-134 will be pending.

Amendments

Sequence Listing

Applicants submit herewith a substitute sequence listing in paper and computer readable form (CRF), complying with the requirements of 37 C.F.R. §§ 1.821-1.825. Applicants respectfully request entry of the substitute sequence listing submitted herewith. Applicants assert that the information recorded in computer readable form is identical to the paper sequence listing submitted herewith. No new matter is introduced by way of this substitute sequence listing. Support for newly entered sequences can be found, for example, in Figures 1, 2, 3, 5, 6, 7, 13, 15, 17, and 19 as originally filed.

Specification-

Please amend the Specification as follows. A version with markings to show changes made to the specification is included herewith as Appendix A.

At page 9, lines 3 to 11, please replace the current paragraph, including the amendments entered February 28, 2001 in the same paragraph, with the following replacement paragraph:

--Figure 3 depicts the construction of the expression plasmids pTH6FXtripa and pTH6FXtripb. Following the teachings of Example 1, tetranectin fusion proteins H6FXtripa (SEQ ID NO:28) and H6FXtripb (SEQ ID NO:29) are produced. To generate expression plasmids pTH6FXtripa and pTH6FXtripb, the polynucleotides encoding tetranectin fragments are fused in the 5' end to nucleotide sequences encoding FXa cleavage site IQGR (SEQ ID NO: 103) and the recognition sites for the restriction endonucleases BglII and KpnI, were cut with the restriction enzymes BclI and HindIII and ligated into the BamHI and HindIII sites of the expression plasmid pT7H6 (Christensen et al., 1991) using standard techniques.--

At Page 9, lines 18-30, please replace the current paragraph, including the amendments entered February 28, 2001 in the same paragraph, with the following replacement paragraph:

--Figure 5 depicts the generation of expression plasmids pTH6FXTN123 and pTCIIH6FXTN123. The amplified DNA fragment encoding the mature tetranectin protein fragment is fused at its 5' end to nucleotide sequences encoding a FX_a cleavage site IEGR (SEQ ID NO: 104). As is apparent from the teachings of Example 2, the N- and C-terminal residues of the mature tetranectin protein fragment are represented in Figure 5 as contained within amino acid fragments SEQ ID NO: 77 and SEQ ID NO: 78, respectively. This DNA was further cut with the restriction enzymes BamHI and HindIII, and ligated into the corresponding sites of the expression plasmids pT7H6 (Christensen et al., 1991) and pT7CIIH6 using standard procedures. pT7CIIH6 was derived from pT7H6 by substitution of the NdeI-HindIII fragment of pT7H6 with the NdeI-HindIII fragment of pLcII (as disclosed by Nagai and Thogersen, 1987).--

At page 10, lines 3 to 16, please replace the current paragraph, including the amendments entered February 28, 2001 in the same paragraph, with the following replacement paragraph:

--Figure 7 depicts the generation of expression plasmids pTH6FXTN12, pTH6FXTN23 and pTH6FXTN3. Amplified DNA fragments encoding tetranectin protein fragments are fused at their 5' end to nucleotide sequences encoding a FX_a cleavage site IEGR (SEQ ID NO: 104). These DNA fragments were further cut with the restriction enzymes BamHI and HindIII, and ligated into the corresponding sites of the expression plasmid pT7H6 (Christensen et al., 1991) using standard procedures. The resulting fusion proteins are represented by SEQ ID NOs: 26, 27 and 30, respectively. As is apparent from the teachings of Example 2, the N- and C-terminal residues of the tetranectin protein fragments contained with fusion proteins 26, 27 and 30 are represented in Figure 7 as contained within amino acid fragments SEQ ID NO: 82 and SEQ ID NO: 83, amino acid fragments SEQ ID NO: 84 and SEQ ID NO: 85, and amino acid fragments SEQ ID NO: 86 and SEQ ID NO: 85, respectively.--

At Page 12, between lines 8 and 9, please delete in its entirety the paragraph that was introduced by amendment on February 28, 2001.

At Page 12, between lines 20 and 21, please delete in its entirety the paragraph that was introduced by amendment on February 28, 2001.

At Page 12, lines 26-32, please replace the current paragraph, including the amendments entered February 28, 2001 in the same paragraph, with the following replacement paragraph:

--The DNA fragment, amplified with the primer pairs having SEQ ID NO:21 and 23, comprising the nucleotide sequence (SEQ ID NO:20) encoding the single chain antibody CEA6, scFV (CEA6), amino acid sequence from Q1 to A261 was cut with the restriction enzymes BamHI and HindIII and ligated into the BamHI and HindIII sites of the expression plasmid pT7H6FXtripb (Example 1) using standard procedures.--

At Page 13, between lines 12 and 13, please delete in its entirety the paragraph that was introduced by amendment on February 28, 2001.

At Page 15, line 30, extending to page 16, line 16, please replace the current paragraph with the following replacement paragraph: